BRUHAT BENGALURU MAHANAGARA PALIKE

Yelahanka Division

Name of Work :Improvements to Roads & Construction of RCC drains & Culverts at Ananthapuram in Ward no-03

	Job code:			Est .Cost Rs.			200.00	Lakhs	
Sl No	Description of Items	Unit	No	L	B	D	Qty	Rate	Amount
	KSRRB 300-3. Earthwork excavation by manual means in ordinary soil invoiving in average horizontal throw up to 2m & an average lift upto 1.5m , excavated surface leveled & sides neatly dressed , the disposed earth to be levelled neatly after breaking of clods complete as per specification MORTH/ Chapter 3. Page No. 142/ Item No. 19.1/ PWD SR 2018-19								
	Earthwork mahalaxmi 4D								
	Main road from 1st main road to 2nd main road		2	26.00	1.20	0.90	56.16		
	Main road from 2nd main road to 3rd main road		2	27.00	1.20	0.90	58.32		
	Main road from 3rd main road to 4th main road		2	28.00	1.20	0.90	60.48	Already work done	
	2nd main road		2	180.00	1.20	0.90	388.80		
	3rd main road		2	173.00	1.20	0.90	373.68		
	cross road-1		2	29.00	1.20	0.90	62.64		
	cross road-2		2	28.00	1.20	0.90	60.48		
	cross road-3		2	27.00	1.20	0.90	58.32		
1	cross road-4		2	24.00	1.20	0.90	51.84		
	L shape road from Pepal tree road		2	100.00	1.20	0.90	216.00		
	3rd main road from Ananthapuram main road to 4th cross road		2	230.00	1.20	0.90	496.80		
	11th main road from Ananthapuram main road to cross road (W) LHS		1	310.00	1.20	0.90	334.80		
	New Culvert								
	2nd main road		1	6.00	1.35	0.90	7.29	⇒ ongoing	
	3rd main road		1	7.00	1.35	0.90	8.51		
	L shape road		1	7.00	1.35	0.90	8.51		
	Basic Rate	130.00					2242.62	233.20	522978.98
	Loading & unLoading	57.00							
	Add for lead for earth (1.28 Tonne / Cum) 16km	38.40							
	Area Weightage @ 6%	7.80							
		233.20							
	KSRB 4-1.2 : Providing and laying in position plain cement concrete of cum mix 1:3:6 with OPC cement @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @0.892cum and fine aggregates @0.465cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation including cost of all materials, labour, HOM of machinery, curing complete as per specifications. KBS 4.1,4.2 (Page No.13, I.No.4.2 of KPWD SR 2018-19)								
	Bed Concrete								
	Main road from 1st main road to 2nd main road		2	26.00	1.20	0.15	9.36		
	Main road from 2nd main road to 3rd main road		2	27.00	1.20	0.15	9.72		
	Main road from 3rd main road to 4th main road		2	28.00	1.20	0.15	10.08		
	2nd main road		2	180.00	1.20	0.15	64.80		
	3rd main road		2	173.00	1.20	0.15	62.28		
	cross road-1		2	29.00	1.20	0.15	10.44		
	cross road-2		2	28.00	1.20	0.15	10.08		
2	cross road-3		2	27.00	1.20	0.15	9.72		
	cross road-4		2	24.00	1.20	0.15	8.64		
	L shape road from Pepal tree road		2	100.00	1.20	0.15	36.00		
	3rd main road from Ananthapuram main road to 4th cross road		2	230.00	1.20	0.15	82.80		
	11th main road from Ananthapuram main road to cross road		2	310.00	1.20	0.15	111.60		
	New Culvert								
	2nd main road		1	6.00	1.20	0.15	1.08		
	3rd main road		1	7.00	1.20	0.15	1.26		
	L shape road		1	7.00	1.20	0.15	1.26		
							429.12	5505.64	2362580.24
	Basic Rate	5194.00							
	Area Weightage @ 6%	311.64							
	Total	5505.64							

	KSRB 4.2.2 : Providing and laying in position reinforced cement concrete of design mix M20 with OPC cement @ 320 kgs. with 20mm and down size graded granite metal coarse aggregates @0.878cum and fine aggregates @ 0.459cum, with superplasticiser @ 3lts confirming to IS9103-1999 Reaffirmed-2008, machine mixed, concrete laid in layers not exceeding 15cms thick, vibrated for all works in foundation plinth and ground floor level for roof slabs, staircase, lintles, retaining walls, return walls, walls (any thickness). including attached plasters, columns, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window cill, fillet etc. including cost of all materials, labour, HOM of machinery, curing, complete as per specifications. Specification No. KBS 4.1, 4.6 (Page 14/4.11) 2018-19								
	Walls								
	Main road from 1st main road to 2nd main road		4	26.00	0.15	0.75	11.70		
	Main road from 2nd main road to 3rd main road		4	27.00	0.15	0.75	12.15		
	Main road from 3rd main road to 4th main road		4	28.00	0.15	0.75	12.60		
	2nd main road		4	180.00	0.15	0.75	81.00		
	3rd main road		4	173.00	0.15	0.75	77.85		
	cross road-1		4	29.00	0.15	0.75	13.05		
	cross road-2		4	28.00	0.15	0.75	12.60		
	cross road-3		4	27.00	0.15	0.75	12.15		
	cross road-4		4	24.00	0.15	0.75	10.80		
	L shape road from Pepal tree road		4	100.00	0.15	0.75	45.00		
	3rd main road from Ananthapuram main road to 4th cross road		2	230.00	0.15	0.75	51.75		
	11th main road from Ananthapuram main road to cross road		2	310.00	0.15	0.75	69.75		
	Raft								
	Main road from 1st main road to 2nd main road		2	26.00	0.90	0.15	7.02		
	Main road from 2nd main road to 3rd main road		2	27.00	0.90	0.15	7.29		
3	Main road from 3rd main road to 4th main road		2	28.00	0.90	0.15	7.56		
	2nd main road		2	180.00	0.90	0.15	48.60		
	3rd main road		2	173.00	0.90	0.15	46.71		
	cross road-1		2	29.00	0.90	0.15	7.83		
	cross road-2		2	28.00	0.90	0.15	7.56		
	cross road-3		2	27.00	0.90	0.15	7.29		
	cross road-4		2	24.00	0.90	0.15	6.48		
	L shape road from Pepal tree road		2	100.00	0.90	0.15	27.00		
	3rd main road from Ananthapuram main road to 4th cross road		2	230.00	0.90	0.15	62.10		
	11th main road from Ananthapuram main road to cross road		1	310.00	0.90	0.15	41.85		
							687.69		
	wall								
	New Culvert								
	2nd main road		2	6.00	0.20	0.80	1.92		
	3rd main road		2	7.00	0.20	0.80	2.24		
	L shape road		2	7.00	0.20	0.80	2.24		
	Raft								
	New Culvert								
	2nd main road		1	6.00	0.90	0.15	0.81		
	3rd main road		1	7.00	0.90	0.15	0.95		
	L shape road		1	7.00	0.90	0.15	0.95		
							9.10		
							696.79	5998.54	**4179722.69**
	Basic Rate	5659.00							
	Area Weightage @ 6%	339.54							
	Total	**5998.54**							

4	KSRB 4-6.4 : **Providing and removing centering, shuttering**, strutting, propping etc., and removal of form work for vertical surface such as walls at any thickness, including attached pilasters, buttresses, plinth cills and string courses cost of all materials, labour complete as per specifications. Specification No. KBS 4.6.2 (Page 16/4.31) of KPWD S.R 2018-19								
	Main road from 1st main road to 2nd main road		8	26.00		0.75	156.00		
	Main road from 2nd main road to 3rd main road		8	27.00		0.75	162.00		
	Main road from 3rd main road to 4th main road		8	28.00		0.75	168.00		
	2nd main road		8	180.00		0.75	1080.00		
	3rd main road		8	173.00		0.75	1038.00		
	cross road-1		8	29.00		0.75	174.00		
	cross road-2		8	28.00		0.75	168.00		
	cross road-3		8	27.00		0.75	162.00		
	cross road-4		8	24.00		0.75	144.00		
	L shape road from Pepal tree road		8	100.00		0.75	600.00		
	3rd main road from Ananthapuram main road to 4th cross road		2	230.00		0.75	345.00		
	11th main road from Ananthapuram main road to cross road		4	310.00		0.75	930.00		
	New Culvert								
	2nd main road		4	6.00		0.80	19.20		
	3rd main road		4	7.00		0.80	22.40		
	L shape road		4	7.00		0.80	22.40		
							5191.00	379.48	1969880.68
	Basic Rate	358.00							
	Area Weightage @ 6%	21.48							
	Total	379.48							
5	KSRB 4.9.2 : Providing T.M.T Fe 500 steel reinforcement for R.C.C. work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured & paid) cost of materials, labour, HOM of machinery complete as per specifications. Specification No. KBS 4.6.3(P-18/4.46.2)								
	For Drain	**Ton**							
	Total RCC Quantity =	Cum					687.69		
	For 1 Cum = 60	Kg					60.00		
		Kg					41261.40		
							41.26	75223.96	**3103845.90**
	For Culvert	**Ton**							
	Total RCC Quantity =	Cum					9.10		
	For 1 Cum = 85	Kg					85.00		
		Kg					773.50		
							0.77	75223.96	**58185.73**
	Basic Rate	70966.00							
	Area Weightage @ 6%	4,257.96							
	Total	**75223.96**							
6	Providing & laying precast drain cover slab of 100 mm thickness in CM 1:3 including cost of all materials, labour, curing, transportation, loading, unloading etc, complete as per the directions of the Engineer In Charge.(1.20 x 0.60 x 0.10)Data rate								
		Sqm							
	Main road from 1st main road to 2nd main road		2	26.00	0.90		46.80		
	Main road from 2nd main road to 3rd main road		2	27.00	0.90		48.60		
	Main road from 3rd main road to 4th main road		2	28.00	0.90		50.40		
	2nd main road		2	180.00	0.90		324.00		
	3rd main road		2	173.00	0.90		311.40		
	cross road-1		2	29.00	0.90		52.20		
	cross road-2		2	28.00	0.90		50.40		
	cross road-3		2	27.00	0.90		48.60		

3103845.90 + 710374.80

58185.73 + 57922.45

	cross road-4		2	24.00	0.90		43.20		
	L shape road from Pepal tree road		2	100.00	0.90		180.00		
	3rd main road from Ananthapuram main road to 4th cross road		2	230.00	0.90		414.00		
	11th main road from Ananthapuram main road to cross road		1	310.00	0.90		279.00		
							1848.60	**2095.00**	**3872817.00**
	DATA Rate	2095.00							
	Total	**2095.00**							
7	Providing & laying precast drain cover slab of 250 mm thickness in CM 1:3 including cost of all materials, labour, curing, transportation, loading, unloading etc, complete as per the directions of the Engineer In Charge.(1.2 x 0.60 x 0.10)Data rate								
	Covering slab	Sqm							
	New Culvert								
	2nd main road		1	6.00	1.80		10.80		
	3rd main road		1	7.00	1.80		12.60		
	L shape road		1	7.00	1.80		12.60		
							36.00	**5418.00**	**195048.00**
		Sqm							
	Data Rate	5418.00							
	Total	**5418.00**							
8	KSRRB M300-14. Excavation for roadwork in all types of soil with hydraulic excavator of 0.9 cum bucket capacity including cutting and loading in tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transporting to the embankment location to a lead of 1.00 km and complete as per specifications. MORTH Specification No 301(pg no-143,S.Lno-19.14)KPWD S.R 2018-19								
	Road Work	Cum							
	cc road								
	cross road		1	52.60	6.00	0.30	94.68		
	L shape Road		1	100.00	6.00	0.30	180.00		
							274.68	**151.66**	**41657.97**
	Basic Rate	41.00							
	Loading & unLoading	57.00							
	Add for lead for earth (1.28 Tonne / Cum) for 16km	51.20							
	Area Weightage @ 6%	2.46							
		151.66							
10	KSRRB M600-1. Construction of dry lean cement concrete mix CC1:5:10 with OPC cement @160Kgs, with 25mm and down sizegraded granite metal coarse aggregate at 0.86cum and fine aggregates @ 0.58cum Sub- base over a prepared sub-grade with (coarse and fine aggregate conforming to IS: 383) aggregate cement ratio not to exceed 15:1. Aggregate gradation after blending to be as per Table 600-1, cement content not to be less than 160 kg/ cum, optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 Mpa at 7 days, mixed in a batching plant, transported to site, laid with a paver with electronic sensor, compacting with 8-10 tonnes vibratory roller, finishing and curing complete as per specifications.MORTH Specification No. 601. (P.No 174, I.No. 22.1 of PWD SR 2018-19)								
		Cum							
	cc road								
	cross road (from Attur lake mn Rd		1	52.60	6.00	0.15	47.34		
	L shape Road		1	100.00	6.00	0.15	90.00		
							137.34	**3800.10**	**521905.73**
	Basic Rate	3585.00							
	Area Weightage @ 6%	215.10							
	Total	**3800.10**							

11	KSRRB M600-2. Cement Concrete Pavement :- Construction of un- reinforced, dowel jointed, plain cement concrete pavement over a prepared sub base with 25mm and down size graded granite metal coarse aggregate with superplastisizer at 3lts conforming to IS 9103- 1999 reaffirmed 2008, (Coarse and fine aggregate conforming to IS:383) mixed in a batching and mixing plant as per approved mix design, transported to site, laid with a fixed form or slip form paver, spread, compacted and finished in a continuous operation including provision of contraction, expansion, construction and longitudinal joints including groove cutting charges, joint filler, separation membrane, sealant primer, joint sealant, debonding strip, dowel bar, tie rod, admixtures as approved, curing compound, finishing to lines and grades as per drawing complete as per specifications. MORTH Specification No. 602. - with M30 @ 360 Kg/cum Cement, C.A, 0.69 cum F.A. 0.46 cum (P.No.175, I.No. 22.2.2 of PWD SR 2018-19)								
	cc road	cum							
	cross road		1	52.60	6.00	0.15	47.34		
	L shape Road		1	100.00	6.00	0.15	90.00		
							137.34	5849.08	**803312.65**
	Basic Rate	5518.00							
	Area Weightage @ 6%	331.08							
	Total	**5849.08**							
12	Vaccum de-watering with vaccum pump and suction mat and . compaction with skin floater clubbed with floating disc including cost of generator, HOM of machinery, Screed Vibratory, Power Floater, blade and disc etc., with all lead and lift. (P.No.176, I.No. 22.7 of PWD SR 2018-19)								
	cc road	Sqm							
	cross road		1	52.60	6.00		315.60		
	L shape Road		1	100.00	6.00		600.00		
							915.60	72.08	**65996.45**
	Basic Rate	68.00							
	Area Weightage @ 6%	4.08							
	Total	**72.08**							
								Sub Total	**17697932.02**
	GST 12%								**2123751.84**
	Project Management Consultancy 0.5%								**88489.66**
	Detailed project report 0.5%								**88489.66**
	Miscellaneous and unforseen Charges								**1336.82**
								Total	**20000000.00**

CERTIFICATE

1 The Work spot has been inspected and the work found to be necessary

2 The Estimate is prepared as per the PWD SR 2018-19

3 The Provision made in estimate are adequate and essential

4 This work comes under BBMP limits.

CIVIL QUALITY CONSULTANTS & ENGINEERS Consultants Bangalore

Asst Engineer
Ward No-03

ಸಹಾಯಕ ಕಾರ್ಯನಿರ್ವಾಹಕ ಅಭಿಯಂತರರು
ಯಲಹಂಕ ವಲಯ ವಾರ್ಡ್ ಸಂಖ್ಯೆ
BBMP
ಬ.ಬ.ಎಂ.ಪಿ. ಬೆಂಗಳೂರು-106

Executive Engineer
Yelahanka Division
BBMP

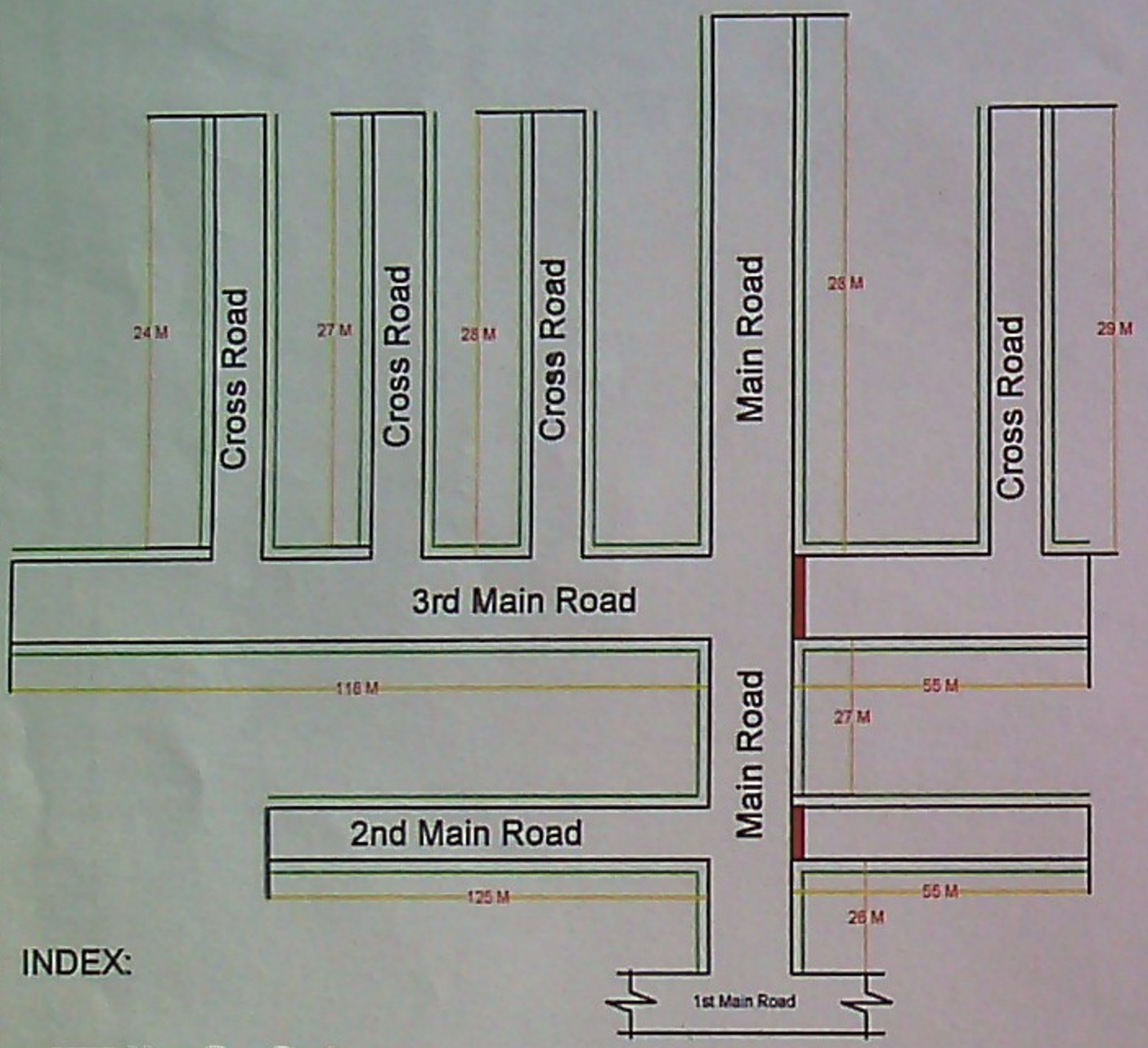
Administrative Sanction for Rs. .....300.00.....
.....three crores only.....
.....
is accorded under head P-2415-
.....Reslevue fund for T and F.....
.....
Registered as CE No. ..... Subject
to conditions contained in enclosed memo
No EE/YNK/DSI/38/2020-21 Dt. 18.9.2020

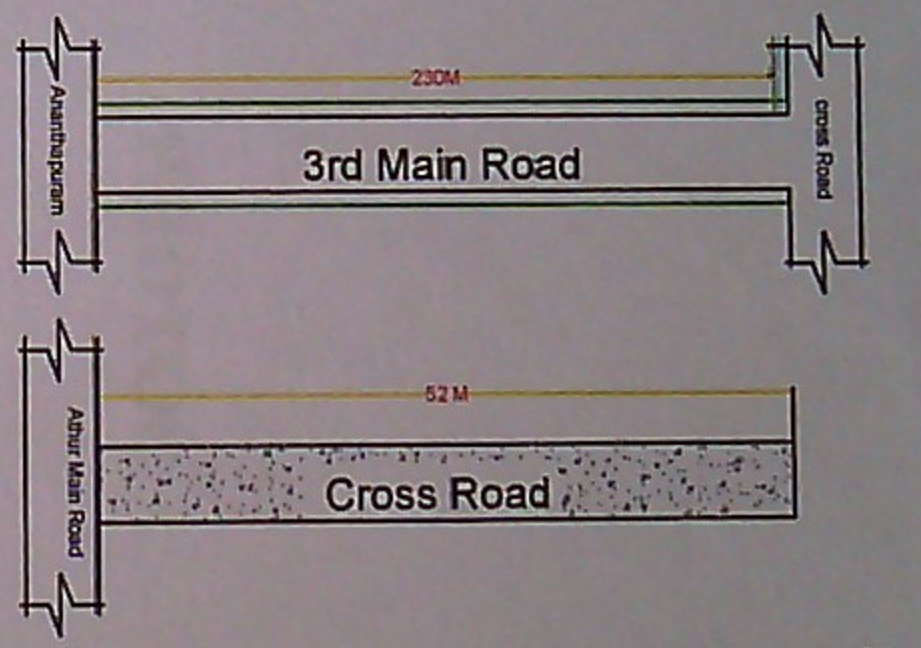
Executive Engineer

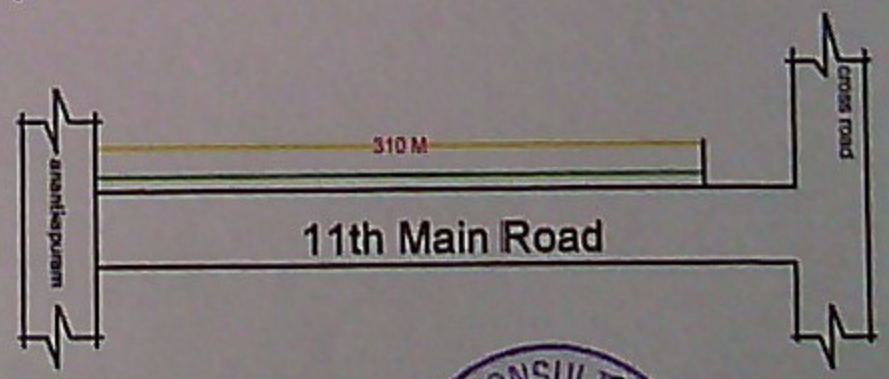
Technical Sanction
Accorded For Rs 200.00 lakhs only
Head of A/C P2415
CER NO :163 Dt 10.12.2018

TA CE (YNK)

Name of work : Improvements to Roads and Construction of RCC Drain and Culvert at Ananthpuram in ward no. 03







INDEX:

- New Rcc Drain
- New Rcc Deck Covering
- New CCRoad

Assistant Engineer

Assistant Executive Engineer
ಸಹಾಯಕ ಕಾರ್ಯನಿರ್ವಾಹಕ ಅಭಿಯಂತರರು
ಯಲಹಂಕ ಉಪನಗರ ಉಪವಿಭಾಗ,
ಬಿ.ಬಿ.ಎಂ.ಪಿ. ಬೆಂಗಳೂರು-106

CIVIL QUALITY CONSULTANTS & ENGINEERS
Bangalore